BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE

IN THE MATTER OF INTEGRATED RESOURCE PLANNING FOR THE PROVISION OF STANDARD OFFER SERVICE BY DELMARVA POWER & LIGHT COMPANY UNDER DEL. C. § 1007(C) & (D)	PSC DOCKET NO. 14-0559

THE MID-ATLANTIC RENEWABLE ENERGY COALITION'S COMMENTS ON DELMARVA POWER & LIGHT COMPANY'S 2014 INTEGRATED RESOURCE PLAN

The Mid-Atlantic Renewable Energy Coalition ("MAREC") submits these comments on the 2014 Integrated Resource Plan ("IRP") filed by Delmarva Power & Light Company ("Delmarva" or "Company"). MAREC appreciates the opportunity to comment on the IRP. For purposes of these comments, MAREC will focus primarily on Delmarva's compliance with the Delaware Renewable Portfolio Standard ("RPS"). MAREC will also address the opportunity through the integrated planning process to incorporate more wind energy resources to act as a hedge against the price volatility of fossil fuels used to generate electricity, and utilize wind as a resource to help meet the requirements of the EPA's Clean Power Plan. MAREC will additionally comment on the importance of integrated resource planning in Delaware as a result of the Electric Utility Retail Customer Supply Act of 2006 ("EURCSA") and the erosion of the State of Delaware's policy supporting renewable energy development due to the non-solar RPS requirements being satisfied in large part by fuel cell generated renewable energy credits ("RECs") derived from natural gas powered fuel cells.

I. INTRODUCTION

MAREC is a nonprofit corporation that was formed to help advance the opportunities for renewable energy development in a substantial portion of the region where the Regional Transmission Organization, PJM Interconnection, LLC ("PJM"), operates. MAREC's footprint includes Delaware, Ohio, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and the District of Columbia. MAREC's membership consists of wind developers, wind turbine manufacturers, service companies, nonprofit organizations, and a transmission company dedicated to the growth of renewable energy technologies to improve our environment, boost economic development in the region, and diversify our electric generation portfolio thereby enhancing energy security. The primary areas of focus for MAREC are to work with state regulators and policymakers to develop rules and supportive policies for renewable energy; provide education and expertise on the environmental sustainability of wind energy; and offer technical expertise and advice on integrating variable wind energy resources into the electric grid. Many of the wind turbines that have been installed regionally have been manufactured by MAREC members. MAREC members are committed to significant growth in renewable energy technologies to support economic development in the region while helping meet Delaware's legislative mandate for renewable energy through the RPS and similar mandates in other jurisdictions in the region.

II. BACKGROUND

Under the RPS, Delmarva is required to procure an annually increasing amount of its energy from renewable resources to serve its Standard Offer Service ("SOS") customers. In compliance year 2015-2016, Delmarva is required to purchase a minimum of 13.0% of its supply for SOS customers from these resources with that percentage increasing to 25% by 2025-2026. In compliance year 2015-2016, 1.0% of the supply procured by Delmarva for the SOS customers

must come from solar photovoltaic resources and increases to 3.5% by the 2025-2026 compliance year.[1] Pursuant to 26 DEL. C. § 352(6), "eligible energy resources" that can be used for compliance with the RPS includes electricity derived from wind, geothermal, and solar electric technology, and a number of other technologies typically considered renewable technologies, such as energy derived from ocean waves and biomass that has been cultivated in a sustainable manner, but not energy derived from a waste-to-energy facility.

When enacting the RPS in 2005, the General Assembly declared that the "benefits" of renewable energy accrued to the public. The General Assembly defined these benefits to include, "improved regional and local air quality, improved public health, increased electric supply diversity, increased protection against price volatility and supply disruption, improved transmission and distribution performance, and new economic development opportunities."[2]

In 2006, after it was determined that Delmarva customers would be seeing increases in their electricity rates in excess of 60% after rate caps were removed as part of the electric restructuring process, the General Assembly moved resolutely to pass EURCSA, which among other things reinstituted integrated resource planning for Delmarva and also authorized Delmarva, subject to Commission approval, to enter into long-term contracts for procurement of power.[3] These contracts could be approved as part of the integrated resource planning process or through a separate application process. Costs for these contracts could be approved by the Commission and included in the rates charged to SOS customers. In developing its IRP, Delmarva is asked to consider, "resources that provide short- or long-term environmental benefits to the citizens of the State (such as renewable resources like solar or wind power);"

---

1 26 DEL. C. § 354(a).
2 26 DEL. C. § 351(b).
3 *See* 26 DEL. C. § 1007(b) and (c).

"resources that promote fuel diversity;" and "resources that encourage price stability."[4] In fact, by passing the EURSCA the General Assembly recognized the need to immediately have a process to obtain long-term contracts for the purpose of stabilizing prices.[5] In 2010, the General Assembly strengthened the RPS law when it increased and extended the law's requirements for the minimum percentage of renewable energy procurement.[6]

In order to meet its RPS requirements, Delmarva, with Commission approval, has executed several long-term power purchase agreements ("PPAs") for energy and/or RECs/SRECs from renewable resources.[7] According to Delmarva's IRP, "Delmarva Power has created a portfolio of renewable resources that when supplemented with REC and SREC offsets from the Bloom Energy project and spot market purchases, will assure compliance with RPS."[8] Currently, Delmarva has three long-term contracts with wind generators:

- AES Armenia Mountain in North Central Pennsylvania for up to 50 MW of wind resources. Delmarva executed this 15-year PPA on June 6, 2008, with contract purchases beginning in December 2009.

---

[4] 26 DEL. C. § 1007(c)(1)(b)

[5] *See* 26 DEL. C. § 1007(d) ("As part of the initial IRP process, to immediately attempt to stabilize the long-term outlook for standard offer supply in the DP&L service territory, DP&L shall file on or before August 1, 2006, a proposal to obtain long-term contracts.").

[6] *See* Senate Substitute No. 1 for Senate Bill No. 119 from the 145th General Assembly, available at http://delcode.delaware.gov/sessionlaws/ga145/chp451.shtml.

[7] These PPAs include: (1) *In the Matter of the Application of Delmarva Power and Light Company for Approval of Solar Renewable Energy Credit Contracts as SREC Supply Sources for Standard Offer Service Customers*, DE PSC Docket No 10-198; (2) *In the Matter of the Application of Delmarva Power and Light Company for Approval of a Pilot Program for the Procurement of Solar Renewable Energy Credits*, DE PSC Docket No. 11-399; (3) *In the Matter of the Application of Delmarva Power and Light Company for Approval of the 2013 Program for the Procurement of Solar Renewable Energy Credits*, DE PSC Docket No. 12-256; and (4) *In the Matter of the Application of Delmarva Power & Light Company for Approval of Land-Based Wind Contracts as a Supply Source for Standard Offer Service Customers*, DE PSC Docket No. 08-205.

[8] IRP at 66-67.

- Gestamp Roth Rock in Western Maryland for up to 40 MW of wind resources. Delmarva executed this 20-year PPA on May 30, 2008, with contract purchases beginning in August 2011.

- Gamesa Chestnut Flats in Central Pennsylvania for up to 38 MW of wind resources. Delmarva executed this 20-year PPA on May 30, 2008, with contract purchases beginning in December 2011.

Impacting Delmarva's responsibility under the RPS is Delaware's Energy Efficiency Resource Standards Act of 2009 ("EERS"), which in part requires Delmarva to meet the State's goal of an electricity savings equivalent of 15% of the 2007 base year electricity demand by 2015.[9] To the extent that there is electricity demand savings as a result of this requirement, lower electricity consumption in a year as a result of compliance with the EERS would reduce the number of RECs needed to comply with the RPS in that year. Although the legislation required that regulations be promulgated by DNREC no later than July 29, 2010, regulations have yet to be issued. Among a number of other important considerations required by EERS, these regulations were to cover energy efficiency measurement and verification standards; how affected energy providers, like Delmarva, would demonstrate, document, and report their compliance with the energy savings goals; detailed procedures and standards concerning what energy efficiency measures count toward compliance; the useful lives of energy efficiency measures; and how to adjust for differences between the base and current years to account for weather, population, and programmatic changes.[10] Notwithstanding that there are no formalized measurement and verification standards, the IRP attempts to estimate Delmarva's compliance with EERS for purpose of determining future electricity demand in the IRP.

In July 2011, Senate Bill No. 124 was enacted amending the RPS to permit Delmarva to count the energy produced from a "qualified fuel cell provider project" towards the compliance

[9] 26 DEL. C. § 1502(a)(1).
[10] 26 DEL. C. § 1504(a).

requirements of the RPS. The bill was enacted as part of a package offered by the State to incentivize Bloom Energy, a fuel cell manufacturer, to develop a manufacturing facility in Delaware, which the State maintained would lead to the creation of at least 900 direct jobs at the plant. Under the bill, Delmarva is permitted to fulfill the equivalent of 1 REC for each megawatt-hour of energy purchased from a qualified fuel cell provider project.[11] In addition, Delmarva also has the ability to use the energy output produced by the fuel cell project to fulfill no more than 30% of its SREC requirements at a ratio of 1 MWh of RECs per 1/6 MWh of SRECs.

The Delaware Code gives the Secretary of the Department of Natural Resources and Environmental Control ("DNREC") discretion, in coordination with the Commission and Delmarva, to adjust the statutory allowances for the partial fulfillment of Delmarva's obligations towards the RPS standard.[12] In testimony before the Commission in the docket to approve a tariff to implement a surcharge on Delmarva customers for the Bloom Energy project, Collin O'Mara, the Secretary of DNREC at that time, proposed that in order to lower the cost impact of the fuel cell project, Delmarva should be able to fulfill the equivalent of 2 RECs for each megawatt hour of energy produced during the first 15 years that the qualified fuel cell project is in service. [13] Secretary O'Mara also proposed that Delmarva not be able to fulfill more than 25% of its SREC compliance requirements with the output of the project in years one through five; 30% in years six through fifteen; and 35% in years sixteen through twenty-one of the project. The Commission adopted the adjustments proposed by DNREC in its decision approving the tariff.[14]

---

11 26 DEL. C. § 353(d)(1).

12 26 DEL. C. § 353(d)(1)(b).

13 *In the Matter of the Application of Delmarva Power and Light Company for Approval of Qualified Fuel Cell Provider Tariffs*, PSC Docket No. 11-362, Findings Opinion and Order No. 8079, dated December 1, 2011, at 16.

14 *Id.* at 28.

In 2011, with the passage of Senate Bill No. 124 as amended by Senate Amendment No. 1, Delmarva became directly responsible for obtaining RECs and SRECs to comply with the State RPS standards for all distribution customers. The requirement for REC procurement would no longer be satisfied through a full requirements contract as part of the SOS auction process.

On April 30, 2014, Exelon Corporation ("Exelon") announced a proposed merger with Pepco Holdings, Inc. ("PHI"), the parent company of Delmarva. On June 18, 2014, Delmarva, Exelon, and PHI jointly filed an Application with the Delaware Public Service Commission ("Commission") to merge the companies.[15] PHI would be merged into Exelon, whereby control of Delmarva would be assumed by Exelon. Similar filings were made on or about that date in all of the other jurisdictions where PHI has operating utilities (New Jersey, Maryland, and the District of Columbia) and at the Federal Energy Regulatory Commission ("FERC") in order to obtain approvals from the various regulatory commissions. A filing was also made in Virginia where PHI still owned some distribution and transmission assets. Exelon and PHI must obtain approval from all of the regulatory commissions where they have filed in order for the merger to move forward. To date New Jersey, Virginia, and FERC have approved the merger.

In Delaware, a number of the parties in the matter, including MAREC, have reached a proposed settlement agreement ("PSA").[16] The PSA may potentially impact the IRP in several respects. First, the merger if consummated would change the control of Delmarva from PHI, an entity comprised of primarily wires or wires-related companies, to Exelon, an entity that has

---

15 *In the Matter of the Application of Delmarva Power & Light Company, Exelon Corporation, Pepco Holdings, Inc., Purple Acquisition Corporation, Exelon Energy Delivery Company, LLC and New Special Purpose Entity for Approvals Under the Provisions of 26 DEL. C. §§ 215 and 1016*, DE PSC Docket No. 14-193.

16 The PSA was filed with the Delaware Public Service Commission as Exhibit A to the Joint Applicants' Motion to Amend the Scheduling Order, on February 13, 2015. *See* DE PSC Docket No. 14-193, Docket Item 16.

wires companies and also is heavily invested in electricity generation. This potential change of control could change Delmarva's approach to its IRP in future filings. Secondly, the PSA contains an important provision that addresses a concern that MAREC has had with past and current IRPs concerning the Delmarva's compliance with the RPS.[17] In essence, Paragraph 84 of the PSA would require competitively sourced procurements via long-term contracts for wind RECs for a portion of the remaining compliance requirements under the non-solar requirements of the RPS. MAREC believes this to be a very positive development, which could lead to a major improvement in Delmarva's ability to cost-effectively comply with the RPS, as more fully discussed herein.

Table 7, on page 71 of the IRP, provides an overview of what Delmarva predicts will be its net RPS REC position during the IRP planning horizon. Table 7 has been recreated below:

Table 7
QFCP Impact on Delmarva Power's Projected Net RPS Position

Compliance Year	REC Requirement	QFCP ERECs	Contracted Resources	Net Position
2015/16	817,508	457,272	338,627	-21,609
2016/17	902,830	457,272	338,627	-106,932
2017/18	980,809	457,272	338,627	-184,911
2018/19	1,054,541	457,272	338,627	-258,643
2019/20	1,127,656	457,272	338,627	-331,757
2020/21	1,167,720	457,272	338,627	-371,822
2021/22	1,209,257	457,272	338,627	-413,359
2022/23	1,251,376	457,272	338,627	-455,477
2023/24	1,292,086	457,272	338,627	-496,188
2024/25	1,334,553	457,272	338,627	-538,655

As this table shows, the Company is forecasting a non-solar REC deficiency in compliance years 2015/16 through 2024/25.

[17] Other provisions, such as additional funding for energy efficiency programs, ring fencing protections, etc. may have significant relevance to the IRP, but will not be addressed as part of these comments.

III. DISCUSSION

A. Delmarva's Compliance with the RPS Should Include Competitive Procurements for Renewable Energy Sourced through Long-Term Contracts.

As previously indicated, Delmarva must comply with the RPS' annually increasing requirements. Table 7 above from the IRP reflects that Delmarva has an immediate deficit of non-solar RECs that will grow to an estimated deficit of nearly 540,000 RECs by compliance year 2024/25. To date Delmarva has met its compliance requirements with a combination of long-term contract procurements, an allocation of the QFCP ERECs to the non-solar REC requirements, and the balance being met through spot market purchases. MAREC commends Delmarva, as it has in previous comments to earlier IRPs, on the Company's efforts to meet a portion of its non-solar REC requirements through long-term contracting as a result of competitive procurements. However, the last long-term contract procurement for the non-solar compliance requirements was entered into in June 2008.

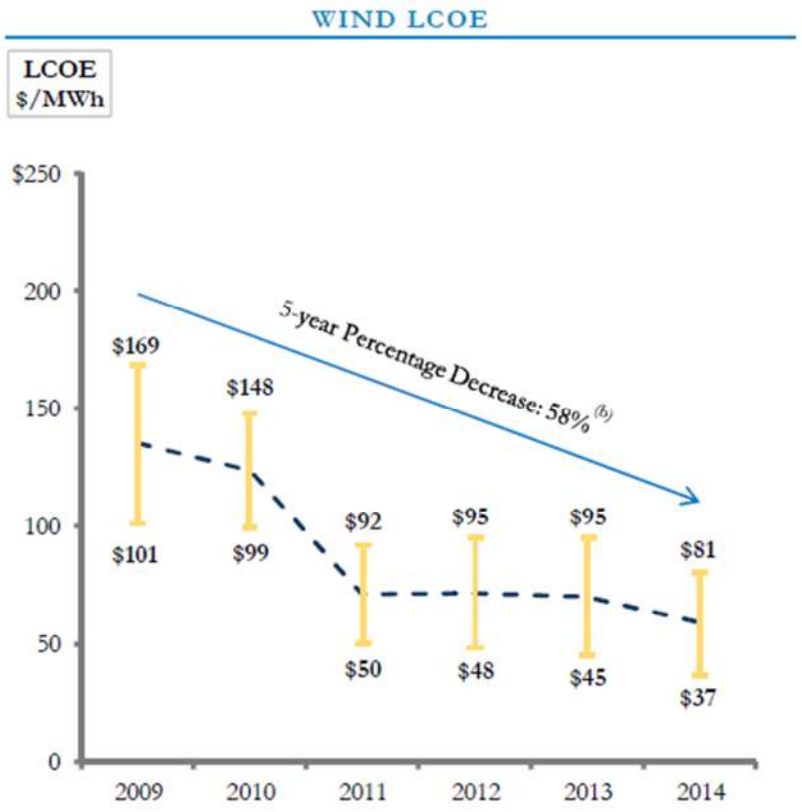
In its last IRP, Delmarva made the assumption that it was going to meet the energy efficiency standard of EERS, which required Delmarva to meet the State's goal of reducing electricity consumption 15% by 2015, based on electricity consumption figures for the year 2007.[18] Without the existence of standards for measuring reduction in energy usage from energy efficiency measures and an insufficient level of energy efficiency programming, it was determined at the conclusion of the 2012 IRP case that Delmarva would come back in the current (2014) IRP and reassess the level of demand reductions due to energy efficiency measures. As a result of the reassessment, what was indicated as a surplus of RECs for several of the years in the

[18] 26 DEL. C. § 1502(a)(1).

2012 IRP turned into a REC deficiency for the entire planning period in the present matter as Table 7 indicates.

MAREC has consistently maintained that Delmarva should meet a reasonable portion of its deficiency in non-solar RECs for RPS compliance through long-term wind energy and REC contracts competitively procured. This position is even more apparent as a result of the restated non-solar REC deficiencies now shown on Table 7.

Wind energy is becoming an increasingly cost-effective resource. The following chart produced by Lazard, the asset management firm, demonstrates the downward trend in the levelized cost of energy ("LCOE") for wind resources.[19] This chart reflects trend declines in the unsubsidized cost of wind energy.



[19] Lazard, *Lazard's Levelized Cost of Energy – Version 8.0*, at p. 9 (September 2014), available at http://www.lazard.com/PDF/Levelized%20Cost%20of%20Energy%20-%20Version%208.0.pdf.

Lawrence Berkeley National Laboratory's ("LBNL") 2013 Wind Tech Report tracked wind power purchase agreements and compared them to average wholesale power prices. The following chart demonstrates that wind power purchase agreement prices have been falling since 2009 and are consistent with wholesale power prices (note: LBNL's review of wind power purchase agreements reflects prices that are inclusive of federal subsidies such as the production tax credit). The Department of Energy's 2013 Wind Technologies Market Report also stated that, "Wind PPA prices have reached all-time lows."[20]

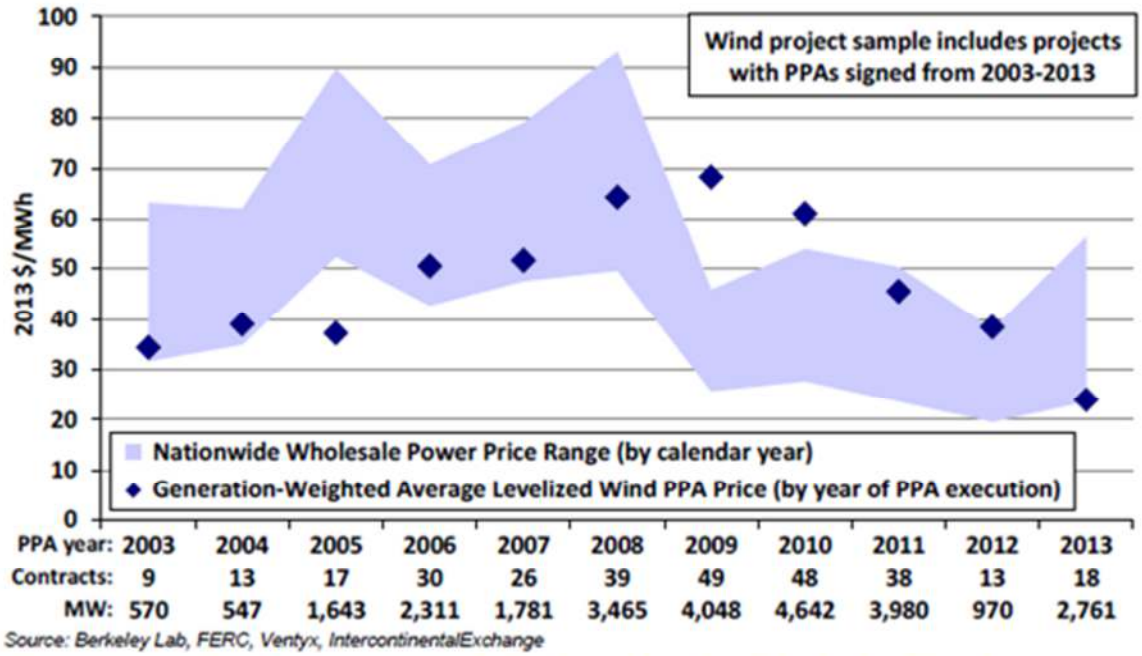


Figure 47. Average levelized long-term wind PPA prices and yearly wholesale electricity prices over time

Given the rate of decline in the LCOE of wind energy and the all-time low prices for wind energy PPAs, MAREC recommends that the Commission direct Delmarva to perform an

[20] U.S. Department of Energy, 2013 Wind Technologies Market Report, at p. ix (August 2014), available at http://emp.lbl.gov/sites/all/files/2013_Wind_Technologies_Market_Report_Final3.pdf.

ongoing review of potential wind energy power purchase agreements in order to capture potential savings as wind energy becomes an increasingly competitive form of energy.

A long-term strategy, especially in the context of the IRP process, makes economic sense. Long-term procurements of renewable energy through a request-for-proposal process would act as a hedge against price volatility and be a competitive tool utilized to help meet Delmarva's present and future RPS requirements. These contracts enable projects to be financed at more advantageous financing terms, which also benefits ratepayers. As previously discussed, when the Delaware General Assembly passed EURSCA, it recognized the need for long-term contracts to reduce price volatility and stabilize pricing. Benefits from such an arrangement would include long-term price certainty, since wind generators (unlike traditional generators) do not have fuel costs and incur minimal production costs. There would be no price volatility with wind, as the price of energy and RECs during the term of the contract would essentially be fixed; whereas market changes could cause drastic price swings with traditional resources, like natural gas and coal.

As previously indicated, MAREC and other parties in the Exelon/PHI merger case in Delaware (PSC Docket No. 14-193) negotiated a provision in the PSA for competitively sourced long-term contracts to procure wind RECs. The provision, which was agreed to by Exelon and Delmarva, calls for three separate competitively sourced sequenced procurements for RECs via long-term contracts. Although MAREC believes the proposed agreement on REC procurement is a very important and positive development in Delmarva's ability to prudently satisfy the non-solar compliance requirements of the RPS, the PSA and the merger itself must first receive Commission approval. Moreover, the proposed merger must also obtain the approval of both the Maryland and District of Columbia Public Service Commissions, and the merger must be

finalized before the agreement in Paragraph 84 of the PSA, including the wind long-term PPA provision can be implemented. If the merger is not consummated by the time the Commission renders a decision on the IRP, MAREC respectfully requests that the Commission require a competitively sourced procurement for long-term contracts for renewable energy as part of its decision on this IRP.

B. The Same Principles Supporting Long-Term Contracts for Wind Energy for RPS Compliance Should Also Be Considered for General Supply Procurement Purposes.

The same Act that reinstituted a requirement for integrated resource planning,[21] EURCSA, significantly changed the course for Delmarva's responsibility to serve its SOS customers. Section 1007(b) of Title 26 of the Delaware Code reads as follows:

> (b) Subject to the approval of the Commission, the standard offer service provider to meet its electric supply requirements shall have the ability to:
> (1) Enter into short- and long-term contracts for the procurement of power necessary to serve its customers;
> (2) Own and operate facilities for the generation of electric power;
> (3) Build generation and transmission facilities (subject to any other requirements in any other section of the Delaware Code regarding siting, etc.);
> (4) Make investments in demand-side resources; and
> (5) Take any other Commission-approved action to diversify their retail load.

No longer did 100 percent of electricity supply have to come from the regional wholesale market through an auction process as had been the requirement under the Electric Restructuring Act of 1999. EURCSA reduced that requirement to only a minimum of 30 percent[22] and clearly sent a strong signal that diversity of supply, environmental benefits of supply choices, renewable energy, and long-term price stability were key components of an IRP. Indeed, 26 DEL. C. §1007(c)(1)(b) states:

---

21 26 DEL. C. § 1007(c)(1).

22 26 DEL. C. §1007(c)(1)(a).

b. In developing the IRP, DP&L may consider the economic and environmental value of:

1. Resources that utilize new or innovative baseload technologies (such as coal gasification);
2. **Resources that provide short- or long-term environmental benefits to the citizens of this State (such as renewable resources like wind and solar power)**;
3. Facilities that have existing fuel and transmission infrastructure;
4. Facilities that utilize existing brownfield or industrial sites;
5. **Resources that promote fuel diversity**;
6. Resources or facilities that support or improve reliability; or
7. **Resources that encourage price stability**.

The IRP must investigate all potential opportunities for **a more diverse supply** at the lowest reasonable cost. (emphasis added).

Consistent with the previous section of these comments showing the rapid rate of decline in prices for wind energy PPAs and the clear direction provided in EURCSA to "promote fuel diversity," "encourage price stability," and utilize resources that provide environmental benefits, MAREC recommends that the Commission direct Delmarva to perform an ongoing review of potential wind energy power purchase agreements in order to capture potential savings as wind energy becomes an increasingly competitive form of energy. This review should be ***in addition to*** Delmarva's review of its compliance with the State's RPS compliance requirements.

C. Integrated Resource Planning Serves a Critical Function in Delaware.

The Delaware General Assembly reinstituted integrated resource planning as a as part of its response to an electricity price increase of more than 60 percent in 2006, when rate caps under the electricity restructuring regime expired. The General Assembly took a measured and holistic approach to remedy what was perceived to be an overreliance on short-term markets and the lack of a diverse electricity supply. No doubt, the prices ratepayers were facing at the time were a reflection of the market conditions, but the General Assembly's response was clearly intended to mitigate the potential for widely fluctuating prices going forward.

Integrated resource planning is a means to ensure that SOS suppliers are taking all practical steps to meet their electric supply requirements in a prudent manner while limiting the potential for these types of price increases from occurring again. Had the General Assembly chosen to leave the market as it was in 2006, relying entirely on short-term market procurements through an auction process, then the need for an integrated planning process would not have been necessary. However, this was not the course chosen by the General Assembly in 2006, and MAREC strongly supports the current law's requirement for such planning as a very reasonable approach to help ensure long-term price stability, cost-effective compliance with the RPS, a more diverse fuel mix, and energy security.

D. Delmarva Should Be Directed to Update Its Carbon Dioxide Scenarios to Reflect the EPA's Final Clean Power Plan.

On June 2, 2014, The Environmental Protection Agency ("EPA") released its proposed Clean Power Plan ("CPP") under Section 111(d) of the Clean Air Act, which would regulate carbon dioxide emissions from existing coal plants. The final rule is expected in the summer of 2015. The CPP charges states with developing compliance plans to meet interim and final carbon dioxide targets set by EPA. The plan proposes, though does not require, that states use four "building blocks" in order to meet the CPP's carbon dioxide reduction targets. Those building blocks are: (1) efficiency uprates to existing coal-fired power plants; (2) increased dispatch of natural gas power plants; (3) additional use of renewable energy; and (4) greater use of energy efficiency.

EPA's proposed CPP rulemaking establishes carbon dioxide emissions baselines and interim and final goals for each state. Delaware's carbon dioxide baseline is 1255 lbs/MWh. The

interim and final goals are 913 lbs/MWh and 841 lbs/MWh, respectively.[23] While the CPP is not yet final, it is highly probable that the final plan will require Delaware to meaningfully reduce emissions of carbon dioxide from existing power plants. The four building blocks, including renewable energy, are likely policy mechanisms to achieve the required carbon dioxide emissions reductions.

Although Delmarva acknowledges the CPP and its potential impact on the current IRP, on page 24 of the IRP, Delmarva suggests that because the CPP has not been finalized and that the states in the region have not yet chosen how to comply, that it would be premature for Delmarva to include the CPP's impact in its current IRP analysis. MAREC suggests that it is not too soon for the Commission to direct Delmarva to begin considering CPP requirements, given that the rule is planned for finalization (summer 2015). MAREC notes that interim targets of the CPP begin in 2020, and the need to make significant progress toward the final 2030 target is well within the current planning horizon of 2025. Additional renewable energy, including wind energy, is a likely policy option for cost effectively reducing carbon dioxide from existing power plants and should be examined as part of the IRP process. To this end, MAREC recommends that the Commission direct Delmarva to update its carbon dioxide scenarios to reflect the final CPP after it is issued this summer.

E. The Delaware RPS Should Be Increased as a Result of the Impact of the Bloom Fuel Cell RECs on the RPS Non-Solar Compliance Requirements.

MAREC acknowledges that neither the Commission nor Delmarva has any authority to increase the RPS requirements, which have been implemented as a statutory enactment of the

[23] U.S. Environmental Protection Agency, Office of Air and Radiation, *Goal Computation Technical Support Document* (June 2014), available at http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-goal-computation.pdf.

General Assembly.[24] However, MAREC believes it is important to recognize that the application of the Bloom fuel cell RECs or QFCP ERECs have been and will continue to be a serious drain on the need for true renewable energy resources to meet the compliance requirements of the RPS. Assuming a capacity factor of 83%,[25] the two Bloom fuel cell projects with a total of 30 MW of nameplate capacity drain 457,272 non-solar RECs a year for the foreseeable future—well past the planning period of this IRP. To bring this into context, for the current 2015/16 compliance year, where 12%[26] of retail electricity supply is to come from non-solar renewable energy resources, the Bloom fuel cells account for about 56% of the RECs needed for RPS compliance.[27] Bloom fuel cells are powered by natural gas, which does not provide the same environmental benefits that resources like wind and solar energy provide. In essence, only 5.3% (of the 12% standard)[28] of the non-solar RPS for compliance year 2015/16 is actually being supplied by truly renewable resources. Even reaching out to the end of the planning period of 2024/25, the Bloom fuel cell impact will be dramatically felt as the QFCP ERECs will comprise about 34%[29] of the non-solar REC requirements.

MAREC understands the economic development purpose behind the qualification of Bloom fuel cells and is not disagreeing with the reasons for seeking the subsidy for this resource. However, MAREC raises this issue for awareness purposes to show the likely unintended consequences of implementing this policy and the need to increase the non-solar requirements of

---

24 The lack of authority to increase the RPS does not mean that Delmarva is restricted to the level of purchases found in the RPS, which is only a minimum procurement amount. Moreover, as discussed in Section III.B of these comments, there is significant support under EURCSA for Delmarva to purchase renewables to meet its general electricity supply needs if prudently procured.

25 IRP at 23.

26 12% = 13% total renewable resource standard minus the 1% solar carve-out.

27 457,272 QFCP ERECs / 817,508 REC requirements.

28 1.0 - 0.56 = 0.44; 0.44 x 12 = 5.3%.

29 457,272 QFCP ERECs / 1,334,553 REC requirements.

the RPS to account for the undue impact on renewable energy development, which by the very enactment of the RPS law is a key public policy of the State.

IV. CONCLUSION

For the reasons stated herein, MAREC respectfully requests that the Commission direct Delmarva to conduct competitively sourced procurements for long-term contracts for renewable energy and RECs and also perform an ongoing review of potential wind energy power purchase agreements for both RPS compliance purposes and general supply-side considerations. MAREC further requests that the Commission direct Delmarva to include an update of its carbon dioxide scenarios to reflect the final CPP.

MAREC appreciates the opportunity afforded to it to provide these comments.

Respectfully submitted,

WOMBLE CARLYLE SANDRIDGE & RICE, LLP

/s/ Jill Agro
Jill Agro (Bar No. 4629)
222 Delaware Avenue, Suite 1501
Wilmington, DE 19801
302.252.4325
jagro@wcsr.com

Attorney for The Mid-Atlantic Renewable Energy Coalition

Dated: March 30, 2015